

CLAIMS

1. A method of switching for carrying out switchover,
5 on a radiofrequency landing system (1) of an aircraft,
between at least:

- a first input (5) of a radiofrequency receiver (4)
of the radiofrequency landing system (1), which input
is connected to a first antenna (2) disposed on a lower
10 part of the aircraft and receives a first signal; and

- a second input (6) of the radiofrequency receiver
(4) of the radiofrequency landing system (1), which
input is connected to a second antenna (3) disposed on
an upper part of the aircraft and receives a second
15 signal,

wherein:

- on initialization, switchover occurs to the input
(5, 6) whose signal exhibits the highest level;

- after the initialization phase:

20 ◦ a first value of a parameter, in relation to the
aircraft, and a second value of this same
parameter, in relation to the runway, is
determined;

25 ◦ the difference between these first and second
values is computed; and

 ◦ switchover occurs to one of said first and second
inputs (5, 6), as a function of this difference;
and

30 - at least one hysteresis loop (S1, S2, S3, S4)
around the switching values is provided.

2. The method as claimed in claim 1,
wherein said parameter is the azimuth.

35 3. The method as claimed in claim 2,
wherein, on initialization, switchover occurs to one of
said inputs (5, 6) only if the level of the
corresponding signal is sufficient to determine the
azimuth of the aircraft.

4. The method as claimed in claim 2,
wherein if, on initialization, the two inputs (5, 6)
exhibit the same signal level, switchover occurs to
5 said first input (5).

5. The method as claimed in claim 2,
wherein a value of azimuth (AZ) of the aircraft is
determined on the basis of the signal received and this
10 value of azimuth (AZ) is compared to predetermined
first and second values (-AZ1, AZ1),
and wherein:

- when this value of azimuth (AZ) lies between said
predetermined first and second values (-AZ1, AZ1), a
15 first mode of switchover (MC1) is implemented; and
- when this value of azimuth (AZ) is less than or
equal to said first value (-AZ1) or greater than or
equal to said second value (AZ1), a second mode of
switchover (MC2) is implemented.

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6. The method as claimed in claim 5,
wherein, to implement said first mode of switchover
(MC1):

- a first signal level (Ninf) of said first signal
25 emanating from said first antenna (2) is compared to a
second signal level (N0) recorded; and

- when said first signal level (Ninf) is greater
than said second signal level (N0), switchover occurs
to said first input (5);

30 - otherwise, said second mode of switchover (MC2) is
implemented.

7. The method as claimed in claim 6,
wherein said second signal level (N0) is obtained by
35 averaging, over a predetermined duration, the signal
present on the input (5, 6) to which switchover occurs
first.

8. The method as claimed in claim 5,

wherein, to implement said second mode of switchover (MC2), switchover occurs to the input (5, 6) which exhibits the highest signal.

5 9. The method as claimed in claim 1,
wherein said parameter is the heading.

10 10. The method as claimed in claim 9,
wherein the discrepancy between the heading of the
aircraft and the heading of the runway is computed, and
wherein, when this discrepancy is less than a
predetermined value, switchover occurs to said first
input (1), otherwise switchover occurs to the input (5,
6) which exhibits the highest signal.

15 11. The method as claimed in claim 9,
wherein, at least before switchover to the first input
(5), one verifies whether a signal is present on this
first input (5), and wherein the switchover to said
20 first input (5) is carried out only if a signal is
present.

12. A switching device for carrying out switchover, on
a radiofrequency landing system (1) of an aircraft,
25 between at least:

- a first input (5) of a radiofrequency receiver (4)
of said radiofrequency landing system (1), which input
is connected to a first antenna (2) disposed on a lower
part of the aircraft and receives a first signal; and
30 - a second input (6) of the radiofrequency receiver
(4) of said radiofrequency landing system (1), which
input is connected to a second antenna (3) disposed on
an upper part of the aircraft and receives a second
signal,
35 which device comprises means (8) able to implement the
method specified in claim 1.

13. An aircraft radiofrequency landing system
comprising:

- a first antenna (2), which is disposed on a lower part of the aircraft;
 - a second antenna (3), which is disposed on an upper part of the aircraft; and
- 5 - a radiofrequency receiver (4) comprising;
- a first input (5), which is connected to said first antenna (2);
 - a second input (6), which is connected to said second antenna (3);
- 10 • an information processing unit (7); and
- a switching device (8) disposed between said inputs (5, 6) and said information processing unit (7) so as to carry out switchover between said first and second inputs (5, 6),
- 15 wherein said switching device (8) is of the type of that specified in claim 12.